

USSR

UDC 612.82/.83-053.6.796

TSONEVA, T. M., AL'OKHINA, G. F., DANYLYUK, V. P., and
DUDNYK, A. I., Laboratory of Age Physiology of Sports, and
Chair of Human Anatomy and Physiology, Odessa Pedagogical
Institute

"Shifts in the Functional Activity of the Central Nervous System
in Young Sportsmen"

Kiev, Fiziologicheskii Zhurnal, Vol 17, No 1, Jan/Feb 71, pp 33-
37

Abstract: The youths -- 11-12 years of age -- participating in
the investigations were divided into two groups, with group one,
the experimental group, consisting of young people engaged in
training for light athletics, and a control group consisting of
youths not engaged in sports except for exercises prescribed in
the school program. The reactivity of the central nervous system
in group one was determined by shifts in the bioelectric activity
of the cerebral cortex as recorded by the electroencephalograph
in the 1st, 5th, 10th, and 15th minute after a ten-second run
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TSONEVA, T. M., et al., Fiziologicheskiy Zhurnal, Vol 17, No 1, Jan/Feb 71, pp 33-37

at maximum tempo or exercises on a bicycle stand. The condition of the neurodynamics under conditions of muscular activity was assessed by shifts in the rapidity of development of sensorimotor reactions. The investigations established that the young athletes are able to endure physical loads greater than those endured by the young people not participating in light athletics, mainly due to activation of cortical structures and improved basic neurodynamic indexes. There is an improvement in the reactivity of the central nervous system permitting the performance of a maximum volume of physical activity at a moderate tempo, which also indicates the greater endurance of young sportsmen as compared with that of the control group.

2/2

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UDC 539.5

~~DANYUSHCHENKOV, I. A.~~, IVASHCHENKO, R. K., MIL'MAN, YU. V.,
TREFILOV, V. I., YAKUSHINA, A. I., Kiev

"Influence of Structure and Testing Conditions on the Mechanical Properties of Low-alloyed Molybdenum"

Kiev, Problemy Prochnosti, No 12, Dec 70, pp 58-63

Abstract: A correlation is established between the mechanical characteristics produced in testing of type TSM-2A sheet molybdenum with various structural states in extension and flexure. It is demonstrated that the ratio of these characteristics decreases slightly as the deformation rate is increased. The plasticity characteristics are independent of the deformation rate if the test temperature is much higher than the temperature of transition to the brittle state, and decrease rapidly as the deformation rate increases if the test temperature is near the temperature of transition to the brittle state.

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1/2 016

UNCLASSIFIED

PROCESSING DATE--04DEC70

TITLE--GEOCHEMISTRY OF DISPERSED ORGANIC SUBSTANCES IN PRECAMBRIAN FORMATIONS OF SPITSBERGEN -U-

AUTHOR--(04)--DANYUSHEVSKAYA, A.I., VOYTSEKHOVSKAYA, A.G., KOLOTOVA, L.F., KRASILSHCHIKOV, A.A.

COUNTRY OF INFO--USSR

SOURCE--GEOL. NEFTI GAZA 1970, 14(3), 47-53

DATE PUBLISHED-----70

SUBJECT AREAS--EARTH SCIENCES AND OCEANOGRAPHY

TOPIC TAGS--GEOCHEMISTRY, ARTIC GEOLOGY, GREEN ALGAE, MOLECULAR STRUCTURE, CARBONYL COMPOUND, GEOLOGIC FORMATION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3007/0146

STEP NO--UR/0009/70/014/003/0047/0053

CIRC ACCESSION NO--AP0135643

UNCLASSIFIED

2/2 016

UNCLASSIFIED

PROCESSING DATE--04DEC70

CIRC ACCESSION NO--AP0135643

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE MOL. STRUCTURE OF DISPERSED
ORG. SUBSTANCES (DOS) IN CARBONATE AND TERRIGENOUS CARBONATE REEFS OF
THE UPPER PRECAMBRAIN LOWER PALEOZOIC SECTION OF SPITSBERGEN WAS
CHARACTERIZED BY IR SPECTROSCOPY, CHROMATOG., X RAY ANAL., PETROGRAPHY,
AND BITUMEN EXAMN. THE ORG. SUBSTANCE IS A PRODUCT OF BLUE GREEN ALGAE
TRANSFORMATION. THE INSOL. ORG. SUBSTANCE PROBABLY IS COMPOSED OF
POLYCYCLIC AROMATIC MOLS., WHICH CONTAIN CARBONYL CO GROUPS (POSSIBLE
QUINONE TYPE) AND SMALL QUANTITIES OF CH SUB2 AND ME SIDE GROUPS. THE
STRUCTURE IS SIMILAR TO THOSE OF THE DOS INPRECAMBRIAN FORMATIONS OF
NORTH AMERICA AND GREENLAND.

UNCLASSIFIED

1/2 024

UNCLASSIFIED

PROCESSING DATE--23OCT70

TITLE--USE OF EXPANDING PLUGGING CEMENT IN THE WELLS OF UNDERGROUND GAS
STORAGE TANKS -U-

AUTHOR--(04)--DANYUSHEVSKIY, V.S., SNEGIREV, N.P., ROZOV, V.N., CHAO, P.H.

COUNTRY OF INFO--USSR

SOURCE--GAZOV. PROM. 1970, 15(2), 6-8

DATE PUBLISHED-----70

SUBJECT AREAS--MATERIALS, PROPULSION AND FUELS

TOPIC TAGS--LIME, NATURAL GAS, CEMENT, SILICA, STEEL, ADHESION,
UNDERGROUND FACILITY, FUEL STORAGE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRA--1998/2041

STEP NO--UR/0492/70/015/002/0006/0008

CIRC ACCESSION NO--AP0122270

UNCLASSIFIED

2/2 024

UNCLASSIFIED

PROCESSING DATE--23OCT70

CIRC ACCESSION NO--AP0122270

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. ADDN. OF GROUND UNSLAKED LIME IN AN UNSTATED AMT. TO THE TITLE CEMENTS GREATLY IMPROVED THEIR EXPANDING POWER, RESISTANCE TO PENETRATION OF GAS AND WATER, AND THEIR ADHESION TO STEEL AND STONE. SILICA IS ALSO ADDED TO COMBINE WITH THE CA(OH) SUB2 FORMED DURING DRYING. PRACTICAL TESTS IN STORAGE AREAS AT 100-168 ATM. GAVE GOOD RESULTS.

UNCLASSIFIED

1/2 G10 UNCLASSIFIED PROCESSING DATE--20NOV70
TITLE--PMR STUDY OF THE TAUTOMERISM OF MERCAPTOALDIMINES OF THE FURAN
SERIES -U-
AUTHOR--(03)-8000AND1, V.S., DANYUSHEVSKIY, YA.L., GOLOFARB, YA.L.
COUNTRY OF INFO--USSR
SOURCE--IZV. AKAD. NAUK SSSR, SER. KHIM. 1970, (3), 675-8
DATE PUBLISHED-----70
SUBJECT AREAS--CHEMISTRY
TOPIC TAGS--HYDROGEN BONDING, STEREOCHEMISTRY, MOLECULAR STRUCTURE,
DIMETHYL SULFOXIDE, HETEROCYCLIC OXYGEN COMPOUND, HETEROCYCLIC NITROGEN
COMPOUND, MERCAPTAN, FURAN, ORGANIC COMPLEX COMPOUND
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--3006/1361 STEP NO--UR/0062/70/000/003/0675/0678
CIRC ACCESSION NO--AP0135035
UNCLASSIFIED

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UNCLASSIFIED

PROCESSING DATE--20NOV70

CIRC ACCESSION NO--AP0135035

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. PMR SPECTRA WERE REPORTED FOR I (R
EQUALS H, CYCLOHEXYL, BETA NAPHTHYL, PH PHCH SUB2). I EXIST
PREDOMINANTLY IN THE TAUTOMERIC FORM SHOWN ABOVE. THE INTERNAL H BOND
IN THE CHELATE CYCLE IS LESS STRONG THAN IN THE THIOPHENE ANALOGS AS A
RESULT OF WHICH IT OFTEN BREAKS, IN PART UNDER INFLUENCE OF POLAR
SOLVENTS SUCH AS ME SUB2 SO, WHILE IN THE THIOPHENE ANALOG NO SUCH
CHANGE TAKES PLACE. THE CHEM. SHIFT OF H PRIME1 PROTON IN I DEPENDS ON
N SUBSTITUENTS AND ITS LARGEST VALUE IS FOUND WITH AROM. SUBSTITUENTS.
AT ELEVATED TEMP. THE EQUIL. OF TAUTOMERS SHIFTS TOWARD FORMS WITH C:NR
GROUPING AND THOSE WITH SH HYDROGEN BONDED TO N. FACILITY:
INST. ORG. KHIM. IM. ZELINSKOGO, MOSCOW, USSR.

UNCLASSIFIED

1/2 007 UNCLASSIFIED PROCESSING DATE--300CT70
TITLE--AROMATIZATION OF ADDUCTS OF FURAN SULFIDES WITH MALEIC ANHYDRIDE
-U-
AUTHOR-(03)-DANYUSHEVSKIY, YA.L., MARAKATKINA, M.A., GOLDFARB, YA.L.
COUNTRY OF INFO--USSR
SOURCE--ZH. ORG. KHIM. 1970, 6(4), 865-70
DATE PUBLISHED-----70
SUBJECT AREAS--CHEMISTRY
TOPIC TAGS--FURAN, SULFIDE, MALEIC ANHYDRIDE, EPOXY COMPOUND, HETEROCYCLIC
OXYGEN COMPOUND, PHTHALIC ANHYDRIDE, ALDEHYDE, AROMATIZATION, SULFUR
ORGANIC COMPOUND
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRA--2000/2086 STEP NO--UR/0366/70/006/004/0865/0870
CIRC ACCESSION NO--AP0125673
UNCLASSIFIED

2/2 007 UNCLASSIFIED PROCESSING DATE--30OCT70
 CIRC ACCESSION NO--AP0125673
 ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE CONDENSATION OF MALEIC
 ANHYDRIDE (I) WITH 4,(RS,SUBSTITUTED),2,METHYLFURANS (III) (R EQUALS ET,
 PH, PHCH SUB2, BU) GAVE
 5,(RS,SUBSTITUTED),3,METHYL,3,6,EPOXY,1,2,3,6,TETRAHYDROPHTHALIC
 ANHYDRIDES (III). IN CONTRAST TO II, 2,ALKYLTHIOFURANS OR
 5,ALKYL,THIO,2,ALKYLFURANS DO NOT FORM STABLE ADDUCTS WITH I. THE
 TREATMENT OF III WITH COLD, CONCD. H SUB2 SO SUB4 AROMATIZED THEM TO 5,
 (RS,SUBSTITUTED),3,METHYLPHTHALIC ANHYDRIDES, WHICH WERE OXIDIZED WITH H
 SUB2 O SUB2 IN ACOH TO 5,(RSO SUB2,SUBSTITUTED),PHTHALIC ACIDS (IV).
 THE DISTN. OF IV IN VACUO GAVE THE CORRESPONDING ANHYDRIDES. THE
 SYNTHESIS OF II IS DESCRIBED. THE OXIDN. OF II GAVE 4,(RO SUB2
 S,SUBSTITUTED),2,METHYLFURANS. THE REACTION OF II WITH HCONME SUB2 AND
 POCL SUB3 GAVE 3,(RS,SUBSTITUTED),4,METHYL,2,FURANCARBOXALDEHYDES.
 FACILITY: INST. ORG. KHIM. IM. ZELINSKOGO, MOSCOW, USSR.

UNCLASSIFIED

USSR

UDC: 621.375.029.64

DAVYDOVA, N. S., DANYUSHEVSKIY, Yu. Z., TELYATNIKOV, L. I., Members of the Scientific and Technical Society of Radio Engineering, Electronics and Communications imeni A. S. Popov

"Linear Theory of a Distributed Microwave Amplifier on a Zener Diode"

Moscow, Radiotekhnika, Vol 27, No 8, Aug 72, pp 77-81

Abstract: The authors consider the technical characteristics of a distributed Zener-diode amplifier in the linear approximation. Relations are found for the basic parameters as a function of the input signal frequency and the controlling bias current density. The parameters of a strip-line silicon amplifier with P^+-N-N^+ structure are calculated. It is found that such an amplifier can provide a gain of 25-30 dB/cm in a band of the order of 15%. The amplifier can act simultaneously as a phase shifter with electronic control, which makes it attractive for use as an active antenna element. The initial results will have to be refined to account for nonlinear effects which can have an appreciable influence on the basic parameters of the amplifier as the amplitude of the propagated wave increases.

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1/2 014
UNCLASSIFIED
PROCESSING DATE--20NOV70
TITLE--LOW TEMPERATURE RADIOLYSIS OF ALIPHATIC SULFIDES -U-
AUTHOR--(C4)--NANOBAASHVILI, YE.M., PANCHVIDZE, M.V., DAPKVIASHVILI, A.G.,
KHIDESHELI, G.I.
COUNTRY OF INFO--USSR
SOURCE--SOGBASHCH. AKAD. NAUK GRUZ. SSR 1970, 57(1), 81-4
DATE PUBLISHED-----70
SUBJECT AREAS--CHEMISTRY, NUCLEAR SCIENCE AND TECHNOLOGY
TOPIC TAGS--RADIOLYSIS, SULFIDE, FREE RADICAL, ALPHA RADIATION, BETA
RADIATION, ORGANIC SULFUR COMPOUND
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRA--3002/1233
CIRC ACCESSION NO--AP0128649
STEP NO--UR/0251/70/057/001/0081/0084
UNCLASSIFIED

UNCLASSIFIED

PROCESSING DATE--20NOV70

2/2 C14

CIRC ACCESSION NO--AP0128649

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. RADIOLYSIS AT 77DEGREESK. OF (C
SUBN H SUB2N PLUS 1) SUB2 S (N EQUALS 1, 2, 3, 4, 5, 7, 10, AND 12,
RESP.) RESULTS IN ABSTRACTION OF ALPHA OR BETA-H ATOMS. THE RADICAL
YIELD INCREASES CURVILINEARLY WITH N. FACILITY: INST. NEORG.
KHM. ELEKTROKHM., TBILISI, USSR.

UNCLASSIFIED

USSR

UDC: 51

DARABAN, I. K.

"A Method of Solving a Minimax Problem"

V sb. Prikl. mat. i programmir. (Applied Mathematics and Programming--
collection of works), vyp. 5, Kishinev, "Shtintsa", 1971, pp 77-81 (from
RZh-Kibernetika, No 4, Apr 72, Abstract No 4v447)

Translation: An algorithm is considered for solving a problem of mathe-
matical programming without restrictions with natural assumptions. The
convergence of the algorithm is proved. Author's abstract.

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UDC: 51

USSR

DARABAN, I. K.

"Algorithm for Finding the Optimum Economic Rate of Growth in the von Neumann Model"

V sb. Prikl. mat. i programir. (Applied Mathematics and Programming--collection of works), vyp. 5, Kishinev, "Shtintsa", 1971, pp 71-77 (from RZh-Kibernetika, No 4, Apr 72, Abstract No 4V481)

Translation: An algorithm is considered for minimizing the function $\varphi(x) = \max_{1 \leq j \leq m} f_j(x)/\psi_j(x)$ on a bounded, closed and convex set M where $f_j(x)$ are continuous and convex, and $\psi_j(x)$ are continuous and concave functions on M for any $1 \leq j \leq m$. The convergence of the constructed algorithm is proved. The problem of finding the optimum economic rate of growth of production in the von Neumann model is a special case of the given problem. Author's abstract.

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UDC 539.3

DARAGAN, V. I. and SACHENKOV, A. V.

"On One Approach to the Theory of Plates of Average Thickness"

Kazan', Issled. po teorii plastin i obolochek. No 8 (Investigations in the Theory of Plates and Shells, Collection of Works), Kazan' University, 1972, pp 96-109 (from Referativnyy Zhurnal -- Mekhanika, No 4, 1973, Abstract No 4V256 by V. Ye. Chepiga)

Translation: Boundary conditions and a system of bending equations are developed from the Lagrange variation principle for plates with transverse loading. The influence of normal transverse stress, transverse shear strains and the constriction of the plate in thickness is calculated in the equations. The original law of change of plates dislocated by their thickness is determined in the form satisfying the boundary conditions of the theory of elasticity, $u_0 = -h/\pi^2 w_0/\partial x \sin \pi z/h$, $w = w_0 \cos \pi z/h$, (\vec{x}, \vec{y}) , (\vec{u}_0, \vec{v}_0) where w_0 is the bending of the mean surface of the plate; h is the thickness. The components of shear in the transverse direction are expressions which solve the equilibrium equation

$$e_{xz} = \sum_{k=1,3,\dots}^{\infty} \phi_k(x,y) \cos \pi k z/h, (\vec{x}, \vec{y}), (\vec{\phi}_k, \vec{\psi}_k)$$

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USSR

DARAGAN, V. I. and SACHENKOV, A. V., Issled. po teorii plastin i obolochek. No 8, 1972, pp 96-109

With the first approximation ($k=1$) and the equilibrium equation of a three-dimensional body an improved presentation was obtained for bending and tangential displacements of the plate. These improved relationships figure in the calculation of deformation components, stresses and in the variation equation. It is mentioned that beginning with the third (and higher) approximation the number of resolving equations remains constant, and their structure is recurrent. The problem of the bending of sinusoidal, transversa, loading, freely resting, square plates is solved. (5 bibliographic entries)

2/2

USSR

MANENKOV, A. A., DARASELIYA, D. M., YEPIFANOV, A. S. (Lebedev
Physics Institute, USSR Academy of Sciences)

"Relaxation in Nonuniformly Broadened EPR Lines"

Moscow, Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, August
1970, pp 445-456

Abstract: Relaxation processes in nonuniformly broadened EPR lines are studied theoretically and experimentally. A theory is developed for strong nonuniform broadening, and allowance is made for cross-relaxation processes within the line. The shapes of the relaxation curves are assessed by the usual method of pulsed saturation as well as for the case of quenching of cross-relaxation in the line. Results of an experimental investigation of EPR lines of Nd^{3+} in $\text{Ca}_5(\text{PO}_4)_3\text{F}$ are presented. The variation with temperature of the relaxation rate under conditions of quenched cross-relaxation is studied. A method is developed for determining the probability density function for cross-relaxation transitions $w(x)$, where x is the frequency $1/2$

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MANENKOV, A. A., et al, Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, August 1970, pp 445-456

detuning. The function for the EPR Nd^{3+} line of $\text{Ca}_5(\text{PO}_4)_3\text{F}$ is determined.

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1/2 020 UNCLASSIFIED PROCESSING DATE--30OCT70
TITLE--FREEZING OF CROSS RELAXATION IN HETEROGENEOUSLY BROADENED EPR LINES
-U-
AUTHOR--(02)--CARASELIYA, D.M., MANENKOV, A.A.
COUNTRY OF INFO--USSR
SOURCE--PIS'MA ZH. EKSP. TEOR. FIZ. 1970, 11(7), 337-9
DATE PUBLISHED-----70
SUBJECT AREAS--PHYSICS
TOPIC TAGS--EPR SPECTRUM, LINE BROADENING, SPIN LATTICE RELAXATION,
FLUORIDE MINERAL, CRYOGENIC PROPERTY
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--2000/1160 STEP NO--UR/0386/70/011/007/0337/0339
CIRC ACCESSION NO--AP0124815
UNCLASSIFIED

2/2 020

UNCLASSIFIED

PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0124815

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. A METHOD IS PROPOSED FOR DETN. OF SPIN LATTICE RELAXATION TIME WHERE THE EFFECT OF CROSS RELAXATION WITHIN THE EPR LINE IS EXCLUDED. THE "FREEZING" EFFECT WAS ACHIEVED BY RAPID SWEEPING OF THE LINE. THE LINE WAS AT THIS MOMENT HOMOGENEOUSLY SATD. AND REDN. OF ANY PART OF THIS LINE TOOK PLACE EXPONENTIALLY ONLY AS A RESULT OF LATTICE RELAXATION. OSCILLOGRAPHS OF THE RELAXATION CURVES OBTAINED WITH SAMPLES OF ND PRIME3 POSITIVE IN FLUOROAPATITE AT 4.2DEGREESK ARE GIVEN AND RESULTS ARE COMPARED WITH THOSE OBTAINED BY THE CONVENTIONAL METHOD. FACILITY: FIZ. INST. IM. LEBEDEVA, MOSCOW, USSR.

UNCLASSIFIED

1/2 020 UNCLASSIFIED PROCESSING DATE--13NOV70
TITLE--SYNTHESIS OF DERIVATIVES OF AZOLES AND POLYMERS BASED ON THEM. VI.
SYNTHESIS OF PYRAZOLINE ALCOHOLS BY THE CONDENSATION OF HYDRAZINE WITH
AUTHOR--(04)--DARBINYAN, E.F., SAKYAN, A.A., ELIAZIAN, M.A., MATSOYAN, S.G.
COUNTRY OF INFO--USSR
SOURCE--ARM. KHIM. ZH. 1970, 23(2), 180-4
DATE PUBLISHED-----70
SUBJECT AREAS--CHEMISTRY, MATERIALS
TOPIC TAGS--CHEMICAL SYNTHESIS, PYRAZOLE, HYDROXYL RADICAL, HYDRAZINE,
MONOMER, POLYESTER RESIN, POLYAMIDE RESIN, POLYURETHANE RESIN
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRA--1999/1845 STEP NO--UR/0426/70/023/002/0180/0184
CIRC ACCESSION NO--AP0123634
UNCLASSIFIED

2/2 020

UNCLASSIFIED

PROCESSING DATE--13NOV70

CIRC ACCESSION NO--AP0123634

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE HEATING OF H SUB2 C:CHC TRIPLE
BOND CC(CH)RR PRIME1 WITH H SUB2 MNH SUB2.H SUB2 O AT 120-30DEGREES GAVE
65-90PERCENT I (R AND R PRIME1 GIVEN): H, H; H, ME; ME, ME; ME, ET;
ME, PH; (CRR PRIME1 EQUALS) CYCLOHEXYL; (CKR PRIME1 EQUALS)
1,2,5,TRIMETHYL,4,PIPERIDYL: (CRR PRIME1 EQUALS) 2,2,DIMETHYL,4,PYRANYL.
THE ALK. HYDROLYSIS OF I GAVE 3,METHYL,2,PYRAZOLINE AND THE
CORRESPONDING RR PRIME1 CO. I ARE POTENTIAL MONOMERS FOR THE PREPN. OF
POLYESTER-POLYAMIDES AND (OR) POLYURETHANES. FACILITY: INST.
ORG. KHIM., EREVAN, USSR.

UNCLASSIFIED

1/2 010 UNCLASSIFIED PROCESSING DATE--04DEC70
TITLE--SYNTHESIS OF AZOLE DERIVATIVES AND POLYMERS BASED ON THEM. IX.
SYNTHESIS OF N,ALKYL,3,VINYLPYRAZOLINE -U-
AUTHOR-(04)-DARBINYAN, E.G., SAAKYAN, A.A., ELIAZIAN, M.A., MATSOYAN, S.G.
COUNTRY OF INFO--USSR
SOURCE--ARM. KHIM. ZH. 1970, 23(4), 290-1
DATE PUBLISHED-----70
SUBJECT AREAS--CHEMISTRY
TOPIC TAGS--ORGANIC AZOLE COMPOUND, PYRAZOLE, VINYL COMPOUND, ALKYL
RADICAL, ORGANIC SYNTHESIS
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--3007/0805 STEP NO--UR/0426/70/023/004/0290/0291
CIRC ACCESSION NO--AP0136239
UNCLASSIFIED

2/2 010

UNCLASSIFIED

PROCESSING DATE--04DEC70

CIRC ACCESSION NO--AP0136239

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. 1,ALKYL,3,VINYL,2,PYRAZOLINES (I) WERE PREPD. FROM CH SUB2:CHC TRIPLE BOND CCH SUB2 OME AND N SUB2 H SUB4 .H SUB2 O VIA 3-(BETA, METHOXYETHYL)PYRAZOLINE (II). II WAS ALKYLATED WITH AN ALKYL HALIDE IN THE PRESENCE OF K SUB2 CO SUB3 AND THEN HEATED IN VACUO WITH KOH TO ELIMINATE MECH. I WERE OBTAINED IN 35-73PERCENT YIELD (ALKYL EQUALS ME, ET, PR, AND BU); THEIR PHYS. CONSTS. WERE TABULATED.

FACILITY: INST. ORG. KHIM., EREVAN, USSR.

UNCLASSIFIED

1/2 009 UNCLASSIFIED PROCESSING DATE--27NOV70
TITLE--AMPEROMETRIC DETERMINATION OF FREE CHLORINE AND HYPOCHLORITE BY
MERCUROUS NITRATE -U-
AUTHOR-(03)-TARAYAN, V.M., ACHARYAN, G.S., DARBINYAN, G.A.

COUNTRY OF INFO--USSR

SOURCE--ARM. KHIM. ZH. 1970, 23(1), 27-30

DATE PUBLISHED-----70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--NITRATE, MERCURY COMPOUND, AMPEROMETRIC TITRATION, CHEMICAL
ANALYSIS, WATER

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRA--3003/1375

STEP NO--UR/0426/70/023/001/0027/0030

CIRC ACCESSION NO--AP0130333

UNCLASSIFIED

2/2 009

UNCLASSIFIED

PROCESSING DATE--27NOV70

CIRC ACCESSION NO--AP0130333

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. AMPEROMETRIC TITRN. WITH 10 PRIME
NEGATIVES -3 TIMES 10 PRIME NEGATIVE3 M HG SUB2 (NO SUB3) SUB2 IS
PROPOSED FOR DETN. OF THE SUM OF CL, HCLD, AND HCLD SUB3 IN A MEDIUM OF
1M H SUB2 SO SUB4 WITH ADDN. OF 0.05-0.1 G KBR. AN EXTERNAL POTENTIAL
OF PLUS 0.6 V IS APPLIED TO THE ELECTRODE COUPLE PT AND MOLAR HGI FOR
THE SELECTIVE DETN. OF CL AND HCLD IN THE PRESENCE OF HCLD SUB3, ADD
50-100 MG KBR TO THE NEUTRAL SAMPLE SOLN., REMOVE THE EXCESS OF FREE BR
PRIME NEGATIVE BY ADDN. OF HG(NO SUB3) SUB2, MAKE THE SOLN. ACID BY
ADDING THE SAME VOL. OF 2M H SUB2 SO SUB4 AND TITRATE WITH HG SUB2 (NO
SUB3) SUB2. THE PRESENT METHOD IS SUITABLE FOR ANAL. OF TAP AND WASTE
WATER. THE HIGHEST RELATIVE ERROR IN DETN. OF 0.009-3.4 MG CL WAS
1.25PERCENT. FACILITY: EREVAN. GOS. UNIV., EREVAN, USSR.

UNCLASSIFIED

USSR

UDC: 539.4:624.011

DARBINYAN, S. S.

"On the Spectrum of Velocities in Analyzing Structures for Seismic Events Beyond the Limit of Elasticity"

Byul. po inzh. seysmol. Mezhdoved. sovet po seysmol. i seysmostoyk. str-vu AN SSSR (Bulletin on Engineering Seismology. Interdepartmental Council on Seismology and Earthquakeproof Construction, Academy of Sciences of the USSR), 1971, No 6, pp 26-30 (from RZh-Mekhanika, No 7, Jul 71, Abstract No 7V869)

Translation: The velocity spectra are calculated on the basis of four accelograms of earthquakes with intensities of 7 and 8 points, assuming that the elastoplastic properties of the mechanical system are characterized by a bilinear diagram. Calculations were done for different values of the period of free oscillations, the coefficient of reinforcements and the coefficient of attenuations. Analysis of the resultant spectra shows that accounting for elastoplastic deformations leads to a reduction in the maximum values of velocities of the order of 25-30 percent. Author's abstract.

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1/2 013 UNCLASSIFIED PROCESSING DATE--04DEC70
TITLE--THE EFFECT OF ELECTRIFYING A SYNTHETIC FILM DURING MANUFACTURE OF
WOUND CONDENSERS -U-
AUTHOR--(02)-RENNE, V.T., DARBINYAN, SH.A. D
COUNTRY OF INFO--USSR
SOURCE--MOSCOW, ELEKTRICHESTVO, NO 2, 1970, PP 74-78
DATE PUBLISHED-----70
SUBJECT AREAS--ELECTRONICS AND ELECTRICAL ENGR., MATERIALS
TOPIC TAGS--ELECTRIC CAPACITOR, SURFACE FILM, PRODUCTION ENGINEERING
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRA--1999/1200 STEP NO--UR/0105/70/000/002/0074/0078
CIRC ACCESSION NO--AP0123167
UNCLASSIFIED

2/2 013
CIRC ACCESSION NO--AP0123167
ABSTRACT/EXTRACT--(U) GP-0-

UNCLASSIFIED

PROCESSING DATE--04DEC70

ABSTRACT. RESULTS ARE GIVEN FROM A STUDY ON THE NATURE OF DEFECTS WHICH ARISE DURING TESTING OF CONDENSERS AT SHARPLY DIMINISHED FIELD INTENSITY. THE REASONS FOR CONSIDERABLE WASTE DURING FILM PRODUCTION WERE ALSO STUDIED. IT IS SHOWN THAT A DECREASE IN DISRUPTIVE STRENGTH OF THE FILM IS CONDITIONED BY PUNCTURES CAUSED BY HARD PARTICLES FALLING ON THE FILM SURFACE AFTER MANUFACTURE. THE FORMATION OF CREASES, FILM ROLL IRREGULARITIES, AND DEVIATION FROM RATED THICKNESS, ETC. ARE CAUSED BY THE STICKING OF THE FILM TO THE MACHINE TOOL GUIDE ROLLERS DURING WINDING AND ALSO BY THE STICKING OF THE ROLL LOOPS TO EACH OTHER. THE ENUMERATED PROCESSES OF STICKING AND FILM CONTAMINATION ARE CONDITIONED BY THE ELECTROSTATIC ATTRACTION OF FILM SURFACE CHARGES RESULTING FROM ELECTRIFICATION. A METHOD IS INVESTIGATED FOR LOWERING THE DEGREE OF FILM ELECTRIFICATION AND FOR LIQUIDATING STICKING BY INTRODUCING CERTAIN DIOXIDES INTO THE FILM COMPOSITION. THE EFFECT MECHANISM OF THESE OXIDES CONSISTS IN INCREASING THE SURFACE MICROROUGHNESS OF THE FILM.

UNCLASSIFIED

USSR

UDC 617-089.5-092

DARBINYAN, T. M. and GOLOVCHINSKIY, V. B.

Mekhanizmy Narkoza (Mechanisms of Anesthesia), Moscow, 1972, 264 pp

Translation:

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DARBINYAN, T. M. and GOLOVCHINSKIY, V. B., *Mekhanizmy Narkoza*, 1972, 264 pp

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1/2 033 UNCLASSIFIED PROCESSING DATE--13NOV70
TITLE--AUTOMATIC MAINTENANCE OF A DEFINITE LEVEL OF ANESTHESIA -U-
AUTHOR--(03)--DARBINYAN, T.M., PERELMUTR, A.S., NEVZOROV, V.P.
COUNTRY OF INFO--USSR
SOURCE--EKSPERIMENTAL'NAYA KHIRURGIYA I ANESTEZIOLOGIYA, 1970, NR 2, PP
61-67
DATE PUBLISHED--70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--ANESTHESIA, AUTOMATIC CONTROL SYSTEM, MEDICAL APPARATUS,
ELECTROENCEPHALOGRAPHY, BLOOD PRESSURE, HEART RATE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRA--1990/0625

STEP NO--UR/0481/70/000/002/0061/0067

CIRC ACCESSION NO--AP0108840

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UNCLASSIFIED

PROCESSING DATE--13NOV70

CIRC ACCESSION NO--AP0108840

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. AUTOMATIC MAINTENANCE OF A DEFINITE LEVEL OF ANESTHESIA IS EXPEDIENT TO CARRY OUT BY MEANS OF THE ANESTHETIC CONCENTRATION IN THE BRONCHOALVEOLAR GAS OF THE PATIENT, SINCE THIS INDEX MORE FULLY REFLECTS THE DEPTH OF ANESTHESIA AND QUANTITATIVELY CHARACTERIZES THE VALUE OF THE MAIN EFFECT ON THE PATIENT DURING ANESTHESIA. AUTOMATIC MAINTENANCE OF A DEFINITE CONCENTRATION OF THE ANESTHETIC IN THE PATIENT'S BRONCHOALVEOLAR GAS ENSURES NOT ONLY A STABLE SUPPLY OF THE ANESTHETIC TO THE PATIENT, BUT ALSO, IN ALL OTHER CONDITIONS BEING EQUAL, LEADS TO LESSER FLUCTUATIONS OF SUCH INDICES AS FREQUENCY INTEGRATED ELECTROENCEPHALOGRAM, SYSTOLIC ARTERIAL PRESSURE AND PULSE RATE WHICH, TO A CERTAIN MEASURE, MAY CHARACTERIZE THE STABILITY OF THE PATIENT'S CONDITION DURING ANESTHESIA. IN ORDER TO ENSURE RAPID CESSATION OF ANESTHESIA IT IS EXPEDIENT TO EMPLOY AN AUTOMATICALLY CHANGING RESPIRATORY CONTOUR OF THE ANESTHETIC APPARATUS, EXCLUDING THE PASSAGE OF THE ANESTHETIC AGENT INTO THE ORGANISM.

FACILITY: LABORATORIYA ANESTEZIOLOGII REANIMATOLOGII INSTITUTA KHIRURG. IM. A.V. VISHNEVSKOGO AMN SSSR. FACILITY: OTDEL NARKOZNOY I REANIMATSIONNOY TEKHNIKI VSESOUZNOGO N I INST. MED. PRIBORO. MOSCOW.

UNCLASSIFIED

Acc. Nr: A90044830

Ref. Code: UR0531

PRIMARY SOURCE: Khirurgiya, 1970, Nr 1, pp 85-94

THE MECHANISM OF ETHER, BARBITURATE AND EPONTOL
ANESTHESIA

Darbinyan, T. M.; Golovchinskiy, V. D.; Plekhotkina, S. I.

In experiments on 35 cats the authors studied the influence of intranarcon, ether and epontol on the excitability of the cortex of large hemispheres and reticular formation of the mid-brain. It was found that in intranarcon administration the transcallosal responses changed but little. Inhalation of ether caused an early inhibition of evoked responses in the reticular formation. The thresholds of desynchronization of EEG in electric stimulation of the reticular formation did not change. The marked reduction of the amplitude of transcallosal responses enables to conclude that ether anesthesia is associated with block of the cortex and not the reticular formation. Introduction of epontol caused a less marked inhibition of EEG desynchronization than in the action of intranarcon; reduction of the amplitude of evoked responses did not noticeably differ from that after the administration of intranarcon. The amplitude

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REEL/FRAME
19771684

1/2 006 UNCLASSIFIED PROCESSING DATE--23OCT70
TITLE--CHLOROMETHYLATION OF 4,ALKOXYPHENYLAALKANECARBOXYLIC ACID ESTERS
-U-
AUTHOR--(02)-AROYAN, A.A., DARBINYAN, V.V.
COUNTRY OF INFO--USSR
SOURCE--ARM. KHIM. ZH. 1970, 23(2), 158-65
DATE PUBLISHED-----70

SUBJECT AREAS--CHEMISTRY
TOPIC TAGS--METHYLATION, CARBOXYLIC ACID ESTER, BENZENE DERIVATIVE,
ALKOXIDE

CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRA--1999/1816 STEP NO--UR/0426/70/023/002/0158/0165
CIRC ACCESSION NO--AP0123606
UNCLASSIFIED

2/2 006

UNCLASSIFIED

PROCESSING DATE--23OCT70

CIRC ACCESSION NO--AP0123606

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. MICROFICHE OF ABSTRACT CONTAINS GRAPHIC INFORMATION. I WERE PREPD. BY ALCOHOLYSIS OF THE RESP. CYANIDES. THUS, 0.5 MOLE 4,ALKOXYBENZYL CYANIDE WAS REFLUXED IN 200 ML ABS. MECH WITH DRY HCL PASSING THROUGH THE SYSTEM. I (R EQUALS ME, N EQUALS 2) WAS PREPD. FROM ET 4,METHOXYBENZYL MALONATE BY CONSECUTIVE HYDROLYSIS, DECARBOXYLATION, AND REESTERIFICATION. I ARE GIVEN IN THE FIRST TABLE. A COOLED (MINUS 4 TO 0 DEGREES) MIXT. OF 0.1 MOLE I, WITH 15 G 40PERCENT SOLN. CH SUB2 O, 30 ML HCL, AND 30 ML C SUB6 H SUB6 WAS TREATED WITH DRY HCL FOR 30 MIN. THE STIRRING WAS CONTINUED AT ROOM TEMP. FOR 3 HR. THE PRODUCTS, II (R PRIME1 EQUALS CL, R PRIME2 EQUALS OME) ARE TABULATED IN THE SECOND TABLE. I (R PRIME1 EQUALS AMINO, R PRIME2 EQUALS OME) WERE PREPD. BY MIXING 0.03 MOLE OF A CORRESPONDING ESTER (II) (R PRIME1 EQUALS CL, R PRIME2 EQUALS OME), 0.07 MOLE SECONDARY AMINE, AND 50 ML ABS. C SUB6 H SUB6, AND REFLUXING FOR 10-12 HR. WORK UP GAVE II (R PRIME1 EQUALS AMINO, R PRIME2 EQUALS OME) TABULATED IN THE SECOND TABLE. THE HYDRAZIDES WERE PREPD. BY REFLUXING 0.01 MOLE OF THE CORRESPONDING II (R PRIME1 EQUALS AMINO, R PRIME2 EQUALS OME) WITH 0.07 MOLE H SUB2 NNH SUB2, FOR 2 HR. WORK UP GAVE II (R PRIME1 EQUALS AMINO, R PRIME2 EQUALS NNH SUB2) TABULATED IN THE SECOND TABLE. FACILITY: INST. TONKOI ORG. KHIM., EREVAN, USSR.

UNCLASSIFIED

USSR

PUPKOV, K. A., DARCHIASHVILI, V. V.

"Tensor Analysis of the Capability of the Brain for Assimilation of Information"

Tr. Mosk. In-ta Elektron. Mashinostr. [Works of Moscow Institute of Electronic Machine Building], 1972, No 28, pp 117-119 (Translated from Referativnyy Zhurnal Kibernetika, No 6, 1973, Abstract No 6V736, by the authors).

Translation: The reaction of the brain to the novelty of a stimulus or adaptation is studied on the basis of tensor calculation.

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USSR

DARCHIASHVILI, V. V.

"Algorithm for Recognition of the Functional State of the Brain"

Tr. Mosk. In-ta Elektron. Mashinostr. [Works of Moscow Institute of Electronic Machine Building], 1972, No 28, pp 113-116 (Translated from Referativnyy Zhurnal Kibernetika, No 6, 1973, Abstract No 6V737, by the author).

Translation: An algorithm is suggested for evaluating the functional state of the brain on the basis of correlation matrices. Basic results are presented from processing of experimental electrophysiological information.

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USSR

DARCHIASHVILI, V. V.

"Algorithm for Recognition of the Functional State of the Brain"

Tr. Mosk. In-ta Elektron. Mashinostr. [Works of Moscow Institute of Electronic Machine Building], 1972, No 28, pp 113-116 (Translated from Referativnyy Zhurnal Kibernetika, No 6, 1973, Abstract No 6V737, by the author).

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USSR

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USSR

DARCHIASHVILI, V. V.

"Algorithm for Recognition of the Functional State of the Brain"

Tr. Mosk. In-ta Elektron. Mashinostr. [Works of Moscow Institute of Electronic Machine Building], 1972, No 28, pp 113-116 (Translated from Referativnyy Zhurnal Kibernetika, No 6, 1973, Abstract No 6V737, by the author).

Translation: An algorithm is suggested for evaluating the functional state of the brain on the basis of correlation matrices. Basic results are presented from processing of experimental electrophysiological information.

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USSR

UDC: 621.317.77

DARCHINYANTS, B. R.

"A Phase Meter"

Moscow, Otkrytiya, Izobreteniya, Promyshlennyye Obraztsy, Tovarnyye Znaki,
No 31, 1970, Soviet Patent No 283336, Class 21, filed 20 Jun 68, p 53

Abstract: This Author's Certificate introduces a phase meter for measuring the phase shift of SHF-band converters with a single-channel measurement system of the interference type utilizing a reflected signal with a measurement line used simultaneously as the phase shift standard and the indicator. As a distinguishing feature of the patent, the device is designed for improved precision and provision is made for direct readout of phase shift from the phase meter indicator at any signal amplitude ratios. Connected to the output of the device to be checked is a load with a modulated coefficient of reflection relative to the matching point where modulation is absent, a linear signal converter being connected to the input of the indicator device.

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1/3 017 UNCLASSIFIED PROCESSING DATE--02OCT70
TITLE--DEVELOPMENT OF A POLAR STORM -U-
AUTHOR--(02)--KHODOSHEVA, D.V., DARCHIVEVA, L.A.
COUNTRY OF INFO--USSR
SOURCE--MOSCOW, GEOMAGNETIZM I AERONOMIYA, VOL X, NO 2, 1970, PP 295-299
DATE PUBLISHED-----70

SUBJECT AREAS--ATMOSPHERIC SCIENCES, EARTH SCIENCES AND OCEANOGRAPHY
TOPIC TAGS--STORM, GEOMAGNETIC FIELD, AURORA, POLAR AREA

CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--1990/0034 STEP NO--UR/0203/70/010/002/0295/0299
CIRC ACCESSION NO--AP0108416
UNCLASSIFIED

2/3 017

UNCLASSIFIED

PROCESSING DATE--02OCT70

CIRC ACCESSION NO--AP0108416

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THERE IS NO UNANIMITY OF OPINION AS TO HOW A POLAR STORM IS GENERATED AND PROPAGATED. THERE ARE AT LEAST THREE MODELS: 1) THE DISTURBANCE BEGINS SIMULTANEOUSLY IN THE ENTIRE POLAR OVAL WITH AN ACCURACY TO SEVERAL MINUTES; 2) THE DISTURBANCE BEGINS AT THE MIDNIGHT MERIDIAN AND THEN IS PROPAGATED IN BOTH DIRECTIONS FROM IT ALONG THE OVAL; 3) THE DISTURBANCE BEGINS IN THE MORNING DAYTIME SECTOR OF THE OVAL AND THEN WITH A LAG OF ABOUT 1 HOUR APPEARS AT THE MIDNIGHT MERIDIAN. THERE IS ALSO A COMPROMISE THEORY THAT EACH POLAR STORM PASSES THROUGH THREE STAGES: THE DISTURBANCE BEGINS IN THE MIDDAY SECTOR OF THE OVAL; AFTER ABOUT 1 ONE HALF HOURS IT WEAKENS AND AT THIS TIME THERE IS A SIMULTANEOUS BURST AT THE MIDDAY AND MIDNIGHT MERIDIANS; APPROXIMATELY 40 MINUTES THEREAFTER THERE IS STILL ANOTHER BURST, AGAIN ONLY AT THE MIDDAY MERIDIAN. IN ORDER TO CLARIFY THIS SITUATION THE AUTHORS MADE A DETAILED ANALYSIS OF 14 POLAR STORMS INVESTIGATED BY G. V. STARKOV, ET AL. (GEOMAGNETIZM I AERONOMIYA, 7, 1967, 367), WHO PROPOSED THE COMPLEX THREE STAGE NATURE OF STORM DEVELOPMENT. ON THE BASIS OF DATA ON THE MAGNETIC FIELD AND AURORAS THE CONCLUSION IS DRAWN THAT THERE IS A SIMULTANEOUS FORMATION AND DEVELOPMENT OF A POLAR STORM THROUGHOUT THE POLAR OVAL. THIS RESULT IS INTERPKETED AS THE SIMULTANEOUS LEAKAGE OF SOFT PLASMA ALONG THE ENTIRE BOUNDARY OF TRAPPED RADIATION. THE AUTHORS CONTEND THAT THE CONCLUSIONS DRAWN BY SOME RESEARCHERS THAT THERE IS A TIME SHIFT IN THE COURSE OF A STORM AT DIFFERENT MERIDIANS, USUALLY INTERPRETED AS A LONGITUDINAL DRIFT OF THE DISTURBANCE SOURCE, ARE ERRONEOUS.

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UNCLASSIFIED

PROCESSING DATE--02OCT70

CIRC ACCESSION NO--AP0108416

ABSTRACT/EXTRACT--THEY ATTRIBUTE THIS TIME SHIFT TO INCORRECT
DETERMINATION OF THE TIME OF STORM ONSET.

UNCLASSIFIED

USSR

UDC 612.42.014.426

BOGINICH, L. F., VASIL'YEV, N. V., DARCHUK, V. A., and MELIK-GAYKAZYAN, Ye. V.,
Chair of Microbiology, Tomsk Medical Institute

"Complex Reaction of Lymphoid Tissue to the Effect of an Alternating Magnetic Field"

Moscow, Patologicheskaya Fiziologiya i Eksperimental'naya Terapiya, Vol 14,
No 4, Jul/Aug 70, pp 73-74

Abstract: A study was made of cytological shifts in the spleen, thymus, and lymph nodes of rats exposed to an alternating magnetic field over an extended period of time. The reaction of the lymphoid tissue occurred in two stages. The first stage, lasting less than a day, consisted of a decrease in the number of lymphoblasts and proplasmocytes and an increase in the number of medium-size lymphocytes. The second stage developed by the 3rd day and was marked by an increase in the number of proplasmocytes and medium-size lymphocytes in all of the organs studied and by an increase in the number of medium-size lymphocytes in the thymus and lymph nodes. The resemblance of the dynamics of proplasmocytes with that of cells of the plasmatic series in the early stages of immunogenesis (the inductive phase of antibody formation) suggests that nonspecific mechanisms play an important part in the development of immunomorphological shifts.

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USSR

SOBOLEV, V., and DARDA, P.

Moscow, Veterinariya, No 8, 1973, p 123

Translation: A coordination conference on foot-and-mouth disease was held in March of this year at the All-Union Foot-And-Mouth Disease Research Institute. The conference was attended by about 100 persons, with the participation of scientists from Soviet veterinary research establishments and heads of the main veterinary administrations of the ministries of agriculture of the Soviet republics.

The participants of the conference discussed the epizootic state of foot-and-mouth disease and methods of combating it, as well as results of studies conducted in this field in 1972 and study plans for 1973.

P. P. Rakhmanin, assistant chief of the main veterinary administration of the USSR Ministry of Agriculture discussed the epizootic state and the means employed to eradicate foot-and-mouth disease, while the director of the All-Union Foot-And-Mouth Research Institute, V. P. Onufriyev, covered the results of studies conducted in 1972 and the program of scientific studies for 1973.

Participating in the discussions following the talks were the directors of veterinary services of the union republics, scientific associates of

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USSR

SOBOLEV, V., and DARDA, P., Veterinariya, No 8, 1973, p 123

veterinary institutes and stations, and representatives of commercial biological enterprises.

All those who presented papers commented that as a result of the anti-foot-and-mouth disease efforts in recent years the epizootic situation has greatly improved. Specialists at veterinary research establishments have studied the course of foot-and-mouth infection and have provided invaluable assistance to practicing veterinarians in the prophylaxis and eradication of this disease.

It was noted, however, that there still remain shortcomings in the organization of anti-foot-and-mouth disease efforts at the primary foci of infection, and that a neglectful attitude is exhibited toward sources of infection and the means by which it is spread; these factors hinder the eradication of foot-and-mouth disease. There are cases in which the plans and cattle immunization schedules are not followed, and instructions for the storage of vaccine and disinfections in foot-and-mouth foci disregarded.

In a number of places there is inadequate control over cattle drives to seasonal pastures and over milk collecting stations and dairies, and poor hygienic conditions prevail at animal breeding farms.

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SOBOLEV, V., and DARDA, P., Veterinariya, No 8, 1973, p 123

Research establishments should accelerate their efforts to produce a highly immunogenic vaccine against foot-and-mouth disease agent, and for the disinfection of milk and milk products in farm enterprises at risk; enhanced efforts should also be made to optimize the immunizing doses of the anti-foot-and-mouth vaccine, predicting the prognosis of active infections, and in formulating practical recommendations along these lines.

The coordination conference passed a resolution calling for careful analysis of the epizootic state of foot-and-mouth disease and the effectiveness of measures taken to prevent the disease in regions where research institutes are active, and to introduce timely corrections into eradication plans relying primarily on prevention, as well as to investigate the course of the disease in the different areas of the USSR and to keep a careful record of foci where foot-and-mouth disease had been previously encountered. In addition, measures must be introduced to elevate the hygienic levels of animal breeding farms, dairies, and meat plants.

The time is ripe for completing studies on the intensity and duration of immunity, and for establishing the optimum doses and schedules for the immunization of large and small livestock with respect to species, age, and physiological state; in addition, the epizootiology of viral carriers and a number of other problems must be studied.

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USSR

SOBOLEV, V., and DARDA, P., Veterinariya, No 8, 1973, p 123

The participants of the conference unanimously agreed to exert maximum effort to increase the efficacy of anti-epizootic measures and to contribute to the successful completion of the plans of the final year of the fifth Five-Year Plan.

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USSR

DARDA, P.

"A Conference on Control of Foot-and-Mouth Disease in Central Asia"

Moscow, Veterinariya, No 1, 1972, pp 121-122

Abstract: A scientific and practical conference on the organization of foot-and-mouth disease control measures in the Central Asian and Transcaucasian republics and Kazakhstan was held in Frunze in September 1971. In the main address, "Basic Tasks in Improving Methods of Preventing and Eradicating Foot-and-Mouth Disease in the Republics of Central Asia and Transcaucasian Republics and Kazakhstan," O. V. Iskhakov, Deputy Chief of the Main Veterinary Administration of the USSR Ministry of Agriculture, cited various reasons for the persistence of the disease: (a) failure to take adequate steps to prevent the pathogen from reaching farms, pastures, and inter-republic cattle runs; (b) poor sanitary conditions on some livestock farms and in meat- and milk-processing plants; and (c) delays in diagnosing the disease. Other specialists discussed the distribution of types and variants of foot-and-mouth disease virus in Asian countries (A. I. Sobko), economic benefits from control measures (I. A. Shchelokov), and recommendations for vaccination of animals in regions where distant pastures are used

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USSR

DARDA, P., Veterinariya, No 1, 1972, pp 121-122

(V. M. Khukhorov, P. M. Nagumanov and E. S. Tazbulatov). A number of veterinarians described efforts to control the disease in Kazakhstan, Tadzhikistan, Azerbaydzhan, Georgia, and Armenia.

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Veterinary Medicine

USSR

UDC 619:616.988.43:614.44

ALEKHIN, R. M., and DARDA, P. N., Main Veterinary Administration, Ministry of Agriculture USSR

"Improving the Organization of Foot-and-Mouth Disease Control Measures"

Moscow, Veterinariya, No 9, 1971, pp 44-46

Abstract: An account is given of measures for the prevention and eradication of foot-and-mouth disease (FMD) outlined in the instructions approved by the Main Veterinary Administration of the USSR Ministry of Agriculture in May 1971. Considerable importance is given to prophylactic measures, mainly the protection of animals from disease vectors, regular and timely vaccination of livestock against FMD, and the strict enforcement of a quarantine and other veterinary sanitation measures in the epizootic areas and adjacent zones. Measures to be implemented in case of an outbreak of the disease in any kolkhoz, sovkhov, seasonal pastures, etc., are dealt with in detail in the instructions. A special section deals with the problem of FMD control in enterprises to which animals are driven for slaughter. If a single animal in a group is found to be infected with FMD virus, all of the animals in the group are killed, and all veterinary sanitation measures applicable to an FMD focus are applied. The responsibility of the managing personnel, veterinary, farm, and enterprise

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USSR

ALEKHIN, R. M., and DARDA, P. N., Veterinariya, No 9, 1971, pp 44-46

workers for implementation of the necessary measures is specifically outlined. A quarantine is usually removed 21 days after all animals are free of disease symptoms. However, no animals from this zone can be taken to market or transferred to other areas for 12 months after lifting of quarantine. The instructions also contain directions for handling animal products from zones in which an outbreak of FMD occurred. A separate section prescribes measures to be taken in the case of an outbreak of the disease caused by an unknown type and variant of FMD virus. For the purpose of more efficient control, all of the areas of possible occurrence of the disease are classified as "epizootic foci," "unsafe point," and "threatened zone."

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USSR

UDC 619:616.988.43-079

DARDA, P. N., Senior Veterinarian, Main Administration of Veterinary Medicine, Ministry of Agriculture USSR

"Identification of Types and Variants of Foot-and-Mouth Disease Virus Consultation"

Moscow, Veterinariya, No 1, Jan 71, pp 105-106

Abstract: A brief description is given of several memoranda prepared by the Main Administration of Veterinary Medicine, Ministry of Agriculture USSR, to assist local laboratories and veterinary technicians in typing foot-and-mouth disease virus. "Instructions for Identifying Types and Subtypes of Foot-and-Mouth Disease Virus," dated 27 August 1969, tells how to determine viral types and subtypes in the complement fixation test. Appendixes provide instructions on the collection, preservation, and shipment of pathological material to a laboratory for purposes of identification, the sequence of operations involved in determining types and subtypes, and the procedure for handling such material for identification purposes in diagnostic laboratories. The Main Administration issued temporary instructions for identifying strains of foot-and-mouth disease virus in the gel-
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USSR

DARDA, P. N., Veterinariya, No 1, Jan 71, pp 105-106

-diffusion test (3 June 1970). The test is employed to identify the type in pathological material where lymph from unopened aphthae from sick animals or the pancreas from dead animals is used as antigen. Other uses of the test are mentioned.

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USSR

UDC 619:616.988.43

CHERNYSH, N. I., DARDA, P. N., and ANTONYUK, V. P.

Moscow, "Kolos" Chto Nuzhno Znat' o Yashchure (What You Should Know About Foot-and-Mouth Diseases), 1970, 56 pp

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How to differentiate foot-and-mouth disease from other diseases		30
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USSR

CHERNYSH, N. I., Moscow, "Kolos", What You Should Know About Foot-and-Mouth Diseases, 1970, 56 pp

Excerpt: The Stability of Foot-and-Mouth Disease Virus - Foot-and-mouth disease virus is resistant to environmental factors as well as to a variety of physical and chemical agents. Its stability is largely a function of the environment in which it happens to be.

Low temperature preserves the virus rather than destroying it. Many investigators have found that the virus remains active more than a year in frozen meat from animals that had to be slaughtered and in frozen manure. It survives more than 6 months on pastures during the fall and winter. On high-altitude pastures in the Tadzhik SSR where sick sheep grazed during the fall, the virus was found to retain its activity until the following May. As a result animals that came to graze there contracted the disease.

Even when dry the virus can survive a long time: more than 6 months in a haystack, about 140 days in bran, about 3 months in straw, 1½ months in dry grain chaff, and about 145 days on wool.

Virus adapted to baby rabbits remains active in dry form at 2 to 4°C for 420 days and at 22 to 32°C for 150 days. In salted meat kept at 1°C, foot-and-mouth disease virus was found in the lymph nodes after 124 days and on the hide after 1½ months. It can survive about 12 days in chilled milk and

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USSR

CHERNYSH, N. I., Moscow, "Kolos," What You Should Know About Foot-and-Mouth Diseases, 1970, 56 pp

about 45 days in refrigerated butter prepared from fresh cream, about 39 days (and in the fall over 100 days) in liquid manure and in stagnant water in barnyards, slaughterhouses, and meat-packing plants. It can also survive a long time on the clothing and shoes of milkmaids, cowherds and other persons tending sick cattle, on articles used in the care of cattle, and in the bedding material used in a foot-and-mouth disease focus.

A high temperature quickly kills the virus. Five minutes' boiling or 30 minutes' heating of infected milk and dairy products at 85°C safely disinfects them. The virus soon dies in a 1 to 2% hot alkali or formaldehyde solution.

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USSR

UDC 576.3:612.017:615.5

DARDYMOV, I. V.

"The Effect of Ginseng and Eleutherococcus Preparation on Metabolism During Physical Loading", pp 76-82, Sintez Belka i Rezistentnost' Kletok, (Proteins Synthesis and Cells Resistance), Leningrad, "Nauka," 1971, 104 pp

Abstract: Experimental data is cited regarding the capacity of ginseng and Eleutherococcus preparations to regulate the nitrogen and carbohydrate-phosphorus metabolism and also oxygen consumption in rats swimming for a two hour period. The work is conducted during the least expenditure of basic energy resources (glycogen, ATP, and creatine phosphate). The regulating effect of the preparations on metabolism also manifests itself during contraction of isolated muscle. The capacity of ginseng and eleutherococcus preparations to have a favorable effect on earlier development of a resistant state of metabolism during physical loading is discussed.

1/1

USSR

UDC 612.744.2+615.739

BREKHMAN, I. I., and DARDYMOV, I. V.

"The Mechanism Increasing the Resistance of the Organism Under the Influence of Ginseng and Eleutherococcus Preparations", pp 83-89, Sintez Belka i Rezistentnost' Kletok, (Proteins Synthesis and Cell Resistance), Leningrad, "Nauka," 1971, 104 pp

Abstract: Experimental data is cited regarding the stimulant effect of ginseng, Eleutherococcus, dibazole, and phenamine (amphetanine) preparations on the functional capacity of mice. Results of studies of carbohydrate metabolism during physical loading after administration of glycosides of ginseng and Eleutherococcus are presented. The role of the adrenals in the stimulating effect of eleutherosides is examined. The capacity of ribonuclease and actinomycin D to inhibit the stimulant effect of Eleuthero-coccus and dibazole preparations, and also the capacity of actinomycin to prevent the regulating effect on carbohydrate metabolism of glycosides of Eleutherococcus and ginseng in swimming rats were shown.

1/1

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1/2 019 UNCLASSIFIED PROCESSING DATE--13NOV70
TITLE--PHARMACOLOGICAL CHARACTERIZATION OF SOME MUSCLES IN ANNELIDS AND
SIPUNCULIDS -U-
AUTHOR--(04)-GER, B.A., BARDYMOV, I.V., LAVRENTYEVA, V.V., MIKHELSON, M.YA.
COUNTRY OF INFO--USSR
SOURCE--ZHURNAL EVOLYUTSIONNOY BIOKHIMII I FIZIOLOGII, 1970, VOL 6, NR 2,
PP 187-197
DATE PUBLISHED-----70
SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES
TOPIC TAGS--WORM, MUSCLE PHYSIOLOGY, ACETYLCHOLINE, CHOLINESTERASE,
CHOLINOLYTIC
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRA--3005/0356 STEP NO--UR/0385/70/006/002/0187/0197
CIRC ACCESSION NO--AP0132587
UNCLASSIFIED

2/2 019

UNCLASSIFIED

PROCESSING DATE--13NOV70

CIRC ACCESSION NO--AP0132587

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. STUDIES HAVE BEEN MADE ON THE CHOLINORECEPTION IN THE PROBOSCIS RETRACTOR OF THE SIPUNCULID PHYSCOSOMA JAPONICUM AND IN BODY WALL MUSCLES OF TWO ANNELIDS, LUMBRICONEREIS IMPATIENT AND SERPULA VERMICULARIS. THE RESULTS WERE COMPARED WITH THOSE OBTAINED ON MUSCLES OF TWO OTHER ANNELIDS, HIRUDO MEDICINALIS AND ALLOLOBOPHORA LONGA. ALL THESE MUSCLES EXHIBIT COMPARATIVELY HIGH SENSITIVITY TO ACETYLCHOLINE PROVIDED THEIR CHOLINESTERASES ARE INHIBITED. CHOLINORECEPTORS OF THE MUSCLES EXAMINED ARE PREDOMINANTLY OF THE NICOTINIC TYPE. HOWEVER THE CLASSIFICATION OF CHOLINORECEPTORS AS MUSCARINIC AND NICOTINIC ONES WHICH IS ACCEPTED FOR VERTEBRATES, CANNOT BE FULLY APPLIED TO INVERTEBRATES. SIMILARLY, CLASSIFICATION OF CHOLINESTERASES AS ACETYLCHOLINESTERASE AND BUTIRYLCHOLINESTERASE DOES NOT EMBRACE ALL THE VARIETY OF INVERTEBRATE CHOLINESTERASES. SOME SIGNS OF OLIGOMERIC STRUCTURE IN THE CHOLINORECEPTORS WERE DISCOVERED IN THE MUSCLES STUDIED. EVIDENT SIGNS OF C-16 STRUCTURE WERE FOUND IN A. LONGA AND S. VERMICULARIS. C-10 STRUCTURE WAS OBSERVED ONLY IN A. LONGA. CHOLINOLYTIC AGENTS WITH TERTIARY NITROGEN INDUCE PERIODIC ACTIVITY IN THE PROBOSCIS RETRACTORS PF PHYSCOSOMA, WHICH RESULTS PRESUMABLY FROM THE EFFECT OF THESE AGENTS ON THE NERVOUS ELEMENTS OF THESE MUSCLES. FACILITY: INSTITUTE OF EVOLUTIONARY PHYSIOLOGY AND BIOCHEMISTRY, USSR ACADEMY OF SCIENCES, LENINGRAD.

UNCLASSIFIED

USSR

UDC 612.6.02:061.3(47) «1970»

LOPATKIN, N. A., and DARENKOV, A. F.

"The Fifth All Union Conference on Transplantation of Organs and Tissues"

Moscow, Urologiya i Nefrologiya, No 3, May/Jun 71, pp 71, 72

Abstract: The conference was held in Gorkiy on 16-18 December 1971 and was attended by surgeons, immunologists, urologists, nephrologists, pathological physiologists, and specialists in other areas, who discussed the results achieved in clinical and experimental organ and tissue transplantation, immunological matching of donors and recipients, studies of tissue incompatibility, methods of preserving organs and tissues, and some organizational problems. While considerable progress has been made in the establishment of new transplantation centers and in surgical techniques, the problem of tissue incompatibility remains essentially unresolved. The decision was made to hold the next meeting in Riga in 1973.

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USSR

UDC: 669.884/.885.053.4.068

DARER, R. S., MUN, A. I., ZHELYDKOVA, G. V.

"Study of Sorption of Lithium and Rubidium by the Hydroxides of Various Metals"

Tr. In-ta Khim. Nauk. AN KazSSR [Works of Institute of Chemical Sciences, Academy of Sciences KazSSR], 1973, No 36, pp 82-86 (Translated from Referativnyy Zhurnal Metallurgiya, No 8, 1973, Abstract No 8G200, by the authors).

Translation: The absorption of Li and Rb by the hydroxides of Fe^{3+} , Al, Sn^{4+} , Ti^{4+} and MnO_2 is studied. The influence of the pH of the solution, various electrolytes, the nature of the sorbent and conditions of its production on the process is determined. The absorption of Li^+ and Rb^+ is strongly influenced by the acid-base properties of the hydroxides. The mechanism of capture of Li^+ and Rb^+ by various hydroxides is studied. The influence of the salt background on the sorption of Li and Rb, MnO_2 , $\text{Al}(\text{OH})_3$ is studied, and it is shown that the effects of secondary cations are determined by the nature of the electrolytes and the nature of absorption of the microcomponents. 3 figures, 14 biblio. refs.

1/1

USSR

UDC: 537.311.33

BANIS, T. YA., DARGIS, A. YU., and POZHELA, YU. K.

"Constant Electromotive Force Appearing During the Effect of Multiple Frequency Super-High Frequency Electric Fields on a Semiconductor"

Moscow, Radiotekhnika i Elektronika, Vol. 15, No 8, 1970, pp 1695-1700

Abstract: The authors study the harmo-electromotive force, constant emf, which appears in a homogeneous cavity-type semiconductor with symmetric, non-linear electrical conductivity where the semiconductor is located in a super-high frequency, not purely sinusoidal, electric field. The harmo-current, harmo-emf, and the harmonic component functions for the electric field are calculated to the sixth harmonic inclusively. Real computations were performed for n-Ge, n-Si, for an inert-ionless instance, and for instances of electrical conductivitytime lag manifestations. The calculated quantitative relationships and the interpretations of the phenomena were proven experimentally. Original article: six figures, five formulas, and seven bibliographic entries.

1/1

USSR

UDC 539.67

DARINSKIY, B. M., and FEDOROV, Yu. A.

"On the Theory of Amplitude-Dependent Internal Friction"

Sb. "Vnutrenneye treniye v metallicheskih materialakh" (Internal Friction in Metallic Materials), Moscow, Izd-vo "Nauka," 1970, pp 82-85

Abstract: Internal friction governed by a breakaway of dislocations from locking points is considered.

Expressions are derived for the number of breakaway dislocations from locking points and internal friction as a function of the applied stress amplitude. The amplitude dependence of internal frictions at the beginning growth stage is compared with a corresponding dependence obtained by Granato-Lucke. 1 figure, 3 references.

1/1

USSR

UDC 539.67

AMMER, S. A., DARINSKIY, B. M., and KOSILOV, A. T.

"Dislocation Internal Friction of Deformed Thread-Like Crystals"

Sb. "Vnutrenneye treniye v metallicheskih materialakh" (Internal Friction in Metallic Materials), Moscow, Izd-vo "Nauka," 1970, pp 65-67

Abstract: Recovery and the temperature dependence of internal friction of torsionally deformed thread-like copper crystals are studied. The growth of $Q^{-1}(T)$ at 100-150° C is observed, which coincides in temperature, with the first recovery stage, and at higher than 500° C temperature also coincides with the second stage of recovery.

It is assumed that the recovery occurs because of spiral dislocations and surface motion, which overcome obstacles in the form of their intersection with other spiral dislocations located in the other slip surfaces.

A formula is obtained for determining the internal friction with consideration of the secondary action speed, the vibration frequency of a sample, and the activation volume. The length of dislocation segments, contributing mainly to Q^{-1} , is evaluated. 1 figure, 5 references.

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USSR

UDC 539.67

DARINSKIY, B. M., and SKRIPNIKOV, V. A.

"Internal Friction in Substitute Solid Solutions"

Sb. "Vnutrenneye treniye v metallicheskih materialakh" (Internal Friction in Metallic Materials), Moscow, 1970, Izd-vo "Nauka," pp 47-54

Abstract: An investigation is made of the dependence of the tensor defect of elastic moduli on concentration and orientation in a high-temperature approximation for body-centered, face-centered, and hexagonal close-packed lattices by methods of statistical mechanics. The interaction in all coordination spheres is taken into account. The frequency dependence of the modulus defect is discussed. 5 references.

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USSR

UDC 539.67

BELYAVSKIY, V. I., DARINSKIY, B. M., and POSTNIKOV, V. S.

"Orientational Dependence of Dislocation Internal Friction"

Sb. "Vnutrenneye treniye v metallicheskih materialakh" (Internal Friction in Metallic Materials"), Moscow, Izd-vo "Nauka", 1970, pp 32-37

Abstract: The pliability defect tensor, governed by the motion of dislocations in an arbitrary slip system, is calculated. Cases of boundary and spiral motion in body-centered and face-centered cubic lattices are considered. It is shown that in single crystals the internal friction has an anisotropic nature. The effect of processing the material on internal friction orientation dependence is discussed, and the results of theoretical calculations and experimental data are compared. 1 table, 1 figure, 6 references.

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USSR

UDC 539.3:551.243

AMMER, S. A., DARINSKIY, B. M., and KOSILOV, A. T.

"Dislocational Internal Friction in Deformed Whiskers"

V sb. Vnutr. treniye v metallich. materialakh (Internal Friction in Metallic Materials -- collection of works), Moscow, Nauka Pub. House, 1970, pp 65-67 (from RZh-Mekhanika, No 12, Dec 70, Abstract No 12V513, Authors' Abstract)

Translation: Recovery and the temperature dependence of internal friction of copper whiskers deformed by twisting are studied. A rise in $Q^{-1}(T)$ in the 100-150° temperature range is observed. This coincides, as to temperature, with the first recovery stage, while at temperatures higher than 500° it also coincides with the second recovery stage. It is assumed that recovery occurs due to the motion of screw dislocations and surfaces, which then surmount obstacles in the form of their intersections with other screw dislocations located in other slip planes. A formula is derived for calculating the internal friction, allowing for the aftereffect rate, frequency of specimen vibration, and activation volume. The length of the dislocational segments making the basic contribution to Q^{-1} is estimated. Bibliography: 5 entries.

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1/2 028 UNCLASSIFIED PROCESSING DATE--18SEP70
TITLE--INTERNAL FRICTION AND SHEAR MODULUS OF TITANIUM CONTAINING, TWO
PHASE FORMING GLASSES DURING THERMAL TREATMENT -U-
AUTHOR-(03)-BALASHOV, YU.S, VARSHAL, B.G., DARINSKIY, B.M.
COUNTRY OF INFO--USSR
SOURCE--IZV. AKAD. NAUK SSSR, NEORG. MATER. 1970, 6(1) 70-3
DATE PUBLISHED-----70
SUBJECT AREAS--MATERIALS
TOPIC TAGS--INTERNAL FRICTION, THERMODYNAMICS, PHASE ANALYSIS, TITANIUM
GLASS, ALUMINOSILICATE GLASS, SHEAR MODULUS
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FAME--1988/0597 STEP NO--UR/0363/70/006/001/0070/0073
CIRC ACCESSION NO--AP0105580
UNCLASSIFIED

2/2 028

UNCLASSIFIED

PROCESSING DATE--18SEP70

CIRC ACCESSION NO--AP0105580

ABSTRACT/EXTRACT--(U) GP-0-

ABSTRACT.

THE EFFECT OF PHASE SEPN. ON ELASTIC AND INELASTIC PROPERTIES OF GLASSES OF THE SiO SUB2 NEGATIVE AL SUB2 O SUB3 NEGATIVE MGO MINUS TIO SUB2 SYSTEM WAS INVESTIGATED BY USING LOW FREQUENCY VIBRATIONS (SIMILAR TO 10 HZ). THE SAMPLES TO BE STUDIED WERE IN THE FORM OF RODS MEASURING 1.5-2 MM IN DIAM. AND 100 MM IN LENGTH. THE CHANGES IN INTERNAL FRICTION AND SHEAR MODULUS OF THESE GLASSES DURING ISOTHERMAL HEATING AND HOLDING WERE STUDIED. IT IS PROPOSED THAT THE OBSERVED CHANGES IN THE INTERNAL FRICTION ARE CAUSED BY SPINODAL PHASE SEPN. AND ARE ASSOCD. WITH THERMODYNAMIC CONSTS. OF THE GLASS.

UNCLASSIFIED

1/2 028 UNCLASSIFIED PROCESSING DATE--18SEP70
TITLE--INTERNAL FRICTION AND SHEAR MODULUS OF TITANIUM CONTAINING, TWO
PHASE FORMING GLASSES DURING THERMAL TREATMENT -U-
AUTHOR--(03)-BALASHOV, YU.S, VARSHAL, B.G., DARINSKIY, B.M. D
COUNTRY OF INFO--USSR
SOURCE--IZV. AKAD. NAUK SSSR, NEORG. MATER. 1970, 6(1) 70-3
DATE PUBLISHED-----70
SUBJECT AREAS--MATERIALS
TOPIC TAGS--INTERNAL FRICTION, THERMODYNAMICS, PHASE ANALYSIS, TITANIUM
GLASS, ALUMINOSILICATE GLASS, SHEAR MODULUS
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--1988/0597 STEP NO--UR/0363/70/006/001/0070/0073
CIRC ACCESSION NO--AP0105580
UNCLASSIFIED

2/2 028

UNCLASSIFIED

PROCESSING DATE--18SEP70

CIRC ACCESSION NO--AP0105580

ABSTRACT/EXTRACT--(U) GP-0-

ABSTRACT. THE EFFECT OF PHASE SEPN. ON ELASTIC AND INELASTIC PROPERTIES OF GLASSES OF THE SiO SUB2 NEGATIVE AL SUB2 O SUB3 NEGATIVE MGO MINUS TIO SUB2 SYSTEM WAS INVESTIGATED BY USING LOW FREQUENCY VIBRATIONS (SIMILAR TO 10 HZ). THE SAMPLES TO BE STUDIED WERE IN THE FORM OF RODS MEASURING 1.5-2 MM IN DIAM. AND 100 MM IN LENGTH. THE CHANGES IN INTERNAL FRICTION AND SHEAR MODULUS OF THESE GLASSES DURING ISOTHERMAL HEATING AND HOLDING WERE STUDIED. IT IS PROPOSED THAT THE OBSERVED CHANGES IN THE INTERNAL FRICTION ARE CAUSED BY SPINDAL PHASE SEPN. AND ARE ASSOCD. WITH THERMODYNAMIC CONSTS. OF THE GLASS.

UNCLASSIFIED

USSR

UDC 612.82/83

DARINSKIY, YU. A., Institute of Physiology imeni I. P. Pavlov, Academy of Sciences USSR, Leningrad

"Effect of the Microelectrode on the Recording of Physiological Parameters of Neurons"

Leningrad, Fiziologicheskii Zhurnal SSSR, No 4, 1973, pp 551-557

Abstract: In giant neurons of the leach *Hirudo medicinalis*, membrane potential and frequency and type of spontaneous bioelectrical activity were found to vary with the position of the microelectrode. The thickness of the tip of the microelectrode, rate, site, and depth of insertion also affected the cell response. High-frequency, low-frequency, rhythmic and nonrhythmic types of spontaneous activity could be recorded in the same cell. The frequency of evoked potential likewise depended on the position of the microelectrode, e.g., stimulation might induce depolarization in one case and hyperpolarization in another.

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USSR

UDC 621.374.33

VIGDORCHIK, V. G., ~~DARKOV, S. K.~~, KORTEVA, T. V., MEYERSON, S. I., POPOV, V. A., SITNIKOV, O. P., TRYKOV, Yu. V., OSTRYY, Kh. Ya.

"A Magnetic Digital Element"

Moscow, Otkrytiya, izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, No 21, Jul 71, Author's Certificate No 308518, Division H, filed 16 Feb 70, published 1 Jul 71, pp 207-208

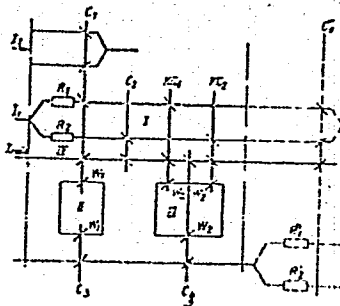
Translation: This Author's Certificate introduces a magnetic digital element which contains information, compensation and two switching cores. The device has a recording circuit, a coupling loop with flux quenching on resistors, and a ready circuit for the switching cores. As a distinguishing feature of the patent, in order to increase speed, improve stability, extend the range of ambient temperature variation and simplify the power supply system, the element is equipped with resistors in the coupling loop, dynamic excitation and dynamic magnetizing cores, one additional winding on each of the switching and compensation cores, and also two additional windings on the information core. The primary windings of the dynamic excitation and dynamic magnetizing cores are connected in series in the circuit of one of the cadence currents. The series-connected auxiliary windings of the switching cores and

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USSR

VIGDORCHIK, V. G., et al., Otkrytiya, izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, No 21, Jul 71, Author's Certificate No 308518, Division H, filed 16 Feb 70, published 1 Jul 71, pp 207-208

the secondary winding of the dynamic excitation core form a loop for dynamic excitation of the switching cores. The series circuit comprised of the secondary winding of the dynamic magnetizing core and one of the auxiliary windings of the information core forms a loop for dynamic excitation of the information core, and the auxiliary winding of the information core and the third winding of the dynamic excitation core are connected in series to the ready winding of the switching core.



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USSR

ANDRIYEVSKAYA, S. V., DARKHOVSKIY, B. S. and ZHIVOV, N. P.

"The Problem of Testing Deviations in Production Processes"

Inform. Metody v Sistemakh Upr. Izmereniy i Kontrolya. T. 1 [Information Methods in Control, Measurement and Testing Systems, Vol 1 -- Collection of Works], Vladivostok, 1972, pp 417-424 (Translated from Referativnyy Zhurnal Kibernetika, No 9, 1973, Abstract No 9V807).

Translation: The following problem is studied. The input vector u acts on initial system S in which it is converted to output vector y . System S itself is not subject to any deviations. Operator F , at the input of which vector u , y and external factor z , independent of u and y act, forms deviation R according to some rule. Deviation R acts on system S , changing its characteristics in the broad sense of this word. It is necessary, by observing vector y and knowing certain a priori information concerning u , z and operator F , to find deviation R as rapidly as possible.

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1/2 012
UNCLASSIFIED
TITLE--USE OF HYDROGEN TO REDUCE A FUSED IRON CATALYST -U-
PROCESSING DATE--30OCT70
AUTHOR--(05)--LOKTEV, S.M., MUKHLENOV, I.P., DAROVSKIKH, I.F., ZVEZDKINA,
L.I., YAKOVLEVA, G.L.
COUNTRY OF INFO--USSR
SOURCE--KHIM. PROM. (MOSCOW) 1970, 46(2), 108-12
DATE PUBLISHED-----70
SUBJECT AREAS--CHEMISTRY
TOPIC TAGS--ELECTROLYTIC REDUCTION, IRON, CATALYST, CATALYTIC ORGANIC
SYNTHESIS, ALIPHATIC ALCOHOL
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRA--1997/0738
CIRC ACCESSION NO--AP0119645
STEP NO--UR/0064/70/046/002/0108/0112
UNCLASSIFIED

2/2 012

UNCLASSIFIED

PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0119645

ABSTRACT/EXTRACT--(U) GP-0-

ABSTRACT. THE OPTIMUM CONDITIONS FOR THE REDN. OF THE FE OXIDE MIXT. (CONTG. FE 0.4, FE₂O₃ 32.1, FE SUB₂O SUB₃ 64, STRUCTURE FORMING AGENTS 2.78, AND K SUB₂O 0.5 WT. PERCENT) BY H IN THE MANUFG. OF A COM. FE CATALYST (USED IN THE SYNTHESIS OF HIGHER ALIPHATIC ALCS.) ARE: 350DEGREES, 50 ATM, LINEAR VELOCITY OF THE H IS LARGER THAN 11 CM-SEC, TIME 20 HR; THE TIME CAN BE REDUCED TO 3 HR BY INCREASING THE TEMP. TO 450DEGREES, AT 20-40 ATM. ELECTROLYTIC H (99.5 VOL PERCENT H) IS USED FOR THE REDN.; THE PARTICLE SIZE BEFORE THE REDN. SHOULD BE 1-3 MM. THE REDUCED CATALYST CONTAINS 90-5PERCENT FE AND HAS A SP. SURFACE OF 14-16 M PRIME²-G; ITS SERVICE LIFE IN SYNTHESIS PROCESSES AT 170-80DEGREES IS LARGER THAN 1000 HR.

UNCLASSIFIED

2/2 020

UNCLASSIFIED

PROCESSING DATE--20NOV70

CIRC ACCESSION NO--AP0126185

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE CHANGES HAVE BEEN STUDIED OF THE COILED CANALICULAR EPITHELIUM IN 36 PERSONS DYING OF ETHYLENGLYCOL POISONING (1.5-26 DAYS AFTER DEATH). INITIAL CHANGES IN THE CANALICULAR EPITHELIUM CORRESPOND TO HYDROPIIC DYSTROPHY. THE DYSTROPHIC PROCESS QUICKLY ADVANCES, THE CELL NUCLEI ARE DESTROYED, THE ENZYME SYSTEMS ARE INJURED AND THE CELL DIES. SUCH CHANGES ARE SIMILAR TO BALLOON DYSTROPHY, DESCRIBED IN LIVER CELLS. THE AUTHOR PROPOSES TO TERM CHANGES IN THE KIDNEYS DUE TO ETHYLENGLYCOL POISONING "BALLOONIZING NEPHROSIS". FACILITY: NOVOKUZNETSKOGO INSTITUTA USVERSHENSTVEVANIYA VRACHEY.

UNCLASSIFIED

1/2 020 UNCLASSIFIED PROCESSING DATE--20NOV70
TITLE--CHARACTER OF LESIONING OF RENAL CANALICULAR EPITHELIUM IN
ETHYLENGLYCOL POISONING -U-
AUTHOR--DARCVSKIY, B.P.
COUNTRY OF INFO--USSR
SOURCE--VRACHEBNOYE DELO, 1970, NR 5, PP 134-137
DATE PUBLISHED-----70
SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES
TOPIC TAGS--ETHYLENE GLYCOL, POISON EFFECT, LIVER, KIDNEY
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--3001/0432 STEP NO--UR/0475/70/000/005/0134/0137
CIRC ACCESSION NO--AP0126185
UNCLASSIFIED

2/2 020 UNCLASSIFIED PROCESSING DATE---20NOV70
CIRC ACCESSION NO--AP0126185
ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE CHANGES HAVE BEEN STUDIED OF
THE COILED CANALICULAR EPITHELIUM IN 36 PERSONS DYING OF ETHYLENGLYCOL
POISONING (1.5-26 DAYS AFTER DEATH). INITIAL CHANGES IN THE CANALICULAR
EPITHELIUM CORRESPOND TO HYDROPI DYSTROPHY. THE DYSTROPHIC PROCESS
QUICKLY ADVANCES, THE CELL NUCLEI ARE DESTROYED, THE ENZYME SYSTEMS ARE
INJURED AND THE CELL DIES. SUCH CHANGES ARE SIMILAR TO BALLOON
DYSTROPHY, DESCRIBED IN LIVER CELLS. THE AUHTOR PROPOSES TO TERM
CHANGES IN THE KIDNEYS DUE TO ETHYLENGLYCOL POISONING "BALLOONIZING
NEPHROSIS". FACILITY: NOVOKUZNETSKOGO INSTITUTA
USVERSHENSTVCVANIYA VRACHEY.

UNCLASSIFIED

USSR

UDC 621.315.592.3:669.782

LOZOVSKIY, V. N., POPOV, V. P., and DAROVSKIY, N. I.

"Investigation of Disruptive Voltage of p-n-Transitions by the Method of Zone Melting With Temperature Gradient on Linear Zones"

Tr. Novocherk. politekhn. in-ta (Works of the Novocherkassk Polytechnical Institute), 1970, 208, pp 57-64 (from RZH-Metallurgiya, No 11, Nov 70, Abstract No 11G386)

Translation: Sb doped n-Si with a resistivity of 0.01 ohm·cm was used. Specimens were cut out in the form of plates 1.2 mm thick and oriented according to facet (110). Linear Al-zones 100 mk in diameter were oriented in the direction [110]. The temperature range varied from 800 to 1250° with temperature a gradient of ~ 100 deg/cm. The change in disruptive voltage of the p-n-transition along the entire thickness of the Si plates was determined at a current density of 5 ma/mm² in thin layers of Si (~ 100 mk). In general, the disruptive voltage of plane silicon p-n-transition changed in the direction of zone motion, a fact related to the initial instability of the zone and diversity of time and temperature conditions of the formation of p-n-transition at different points along the trajectory of the zone. A method is proposed

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USSR

LOZOVSKIY, V. N., Tr. Novocherk. politekhn. in-ta, 1970, 208, pp 57-64 (from RZH-Metallurgiya, No 11, Nov 70, Abstract No 11G386)

for the elimination of nonuniformity of the disruptive voltage of the p-n-transition by additional annealing of the specimen in the field of the temperature gradient after zone melting with the temperature gradient. 2 ill., 11 bibl. entries.

O. Myakisheva

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USSR

DUGLADZE, G. M., DARSVELIDZE, G. Sh., and TSAGAREYSHVILI, G. V., Academy of Sciences Georgian SSR, Institute of Metallurgy

"High-Temperature Internal Friction in Boron Fibers" (Presented by Academician F. N. Tavadze, Nov 23, 1972)

Tbilisi, Soobshcheniya Akademii nauk Gruzinskoy SSR, Vol 70, No 1, 1973, pp 141-143

Abstract: Results are presented of measurements of the internal friction of boron fibers (diam. $\sim 100\mu$) in the temperature interval from room temperature to 700°C . The measured fibers were produced by precipitation of boron from the gaseous phase on a heated tungsten wire (diam. $\sim 12.5\mu$). Boron fibers coated with a layer of boron carbide (thickness $\sim 5\mu$) were also measured. The investigation results are discussed by reference to diagrams showing the temperature dependence of internal friction of boron fibers and the effect of annealing at 650 and 850°C on the height of the high-temperature peak, the effect of the diameter of the specimen on the high-temperature peak, the frequency dependence

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USSR

DUGLADZE, G. M., et al., Soobshcheniya Akademii nauk Gruzinskoy SSR, Vol 70, No 1, 1973, pp 141-143

of the temperature of the maximum of the internal friction, and temperature dependences of the modulus of rigidity of pure boron and of the internal friction of pure boron fibers, fibers coated with a boron carbide layer, and fibers annealed at 650°C. The activation energy of the relaxation process, determined by the frequency shift of the peak of internal friction, was found to be 55.2 kcal/mol (2.36 eV). The viscous behavior of boundaries of small boron crystals of fibers in the strain field is assumed to be the probable mechanism causing the appearance of the 380-deg. peak of internal friction. Four figures, five bibliographic references.

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1/3 . 029 UNCLASSIFIED PROCESSING DATE--18SEP70
TITLE--INTERNAL FRICTION OF IRON BORON ALLOYS -U-
AUTHOR-(05)-METREVELI, Y.SH., TSAGAREYSHVILI, G.V., MIKELADZE, A.G.,
~~ZOIDZE, N.A.~~ DARSVELIDZE, G.SH.
COUNTRY OF INFO--~~USSR~~
SOURCE--METALLOVED. TERM. OBRAB. METAL. 1970, (1) 21-4
DATE PUBLISHED-----70

SUBJECT AREAS--MATERIALS
TOPIC TAGS--INTERNAL FRICTION, IRON ALLOY, BORON ALLOY, ACTIVATION
ENERGY, THERMAL EFFECT, TEST METHOD

CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRA--1980/1264 STEP NO--UR/0129/70/000/001/0021/0024
CIRC ACCESSION NO--AP0049427
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PROCESSING DATE--18SEP70

2/3 029

CIRC ACCESSION NO--AP0049427
ABSTRACT/EXTRACT--(U) GP-0-

ABSTRACT. INTERNAL FRICTION WAS INVESTIGATED OF PURE FE, CRYST. B, AND FE-B ALLOYS AFTER VARIOUS THERMAL TREATMENTS. INTERNAL FRICTION WAS MEASURED ON WIRE SPECIMENS (0.75-0.8 MM IN DIAM. AND 100 MM LENGTH) WITH DIRECT AND INVERSE TORSION PENDULUM IN A PERMANENT MAGNETIC FIELD OF 300 OE AT TEMPS. MINUS 190-600DEGREES IN AN INERT ATM., OR AT 10 PRIME NEGATIVE 4 TORR. INTERNAL FRICTION OF ANNEALED FE (300 HR AT 700DEGREES IN WET H) DEPENDS LITTLE ON TEMP. AT MINUS 190-70DEGREES. ONE PEAK AT MINUS 75DEGREES WAS OBSD. TWO WEEKS HOLDING AT ROOM TEMP. DID NOT EFFECT THE HEIGHT OF THE PEAK. THE PEAK IS REMOVED BY HEATING TO 150DEGREES. WHEN FREQUENCY IS INCREASED 1-3.5 HZ, THE PEAK SHIFTS SIMILAR TO 12DEGREES. FROM THE PEAK SHIFT THE ACTIVATION ENERGY WAS DETD. AS 6.4KCAL-MOLE. DURING INVESTIGATION OF TEMP. DEPENDENCE OF INTERNAL FRICTION OF B, A PEAK AT 260DEGREES WAS REVEALED. ACTIVATION ENERGY DETD. FROM TEMP. SHIFT WAS 20 PLUS OR MINUS 2KCAL-MOLE. IN FE SPECIMENS CONTG. 0.004-0.016PERCENT B THE PEAK OF INTERNAL FRICTION WAS AT 40DEGREES. DEPENDENCE OF INTERNAL FRICTION ON B CONTENT IN FE-B ALLOYS WITH GRAIN SIZE 70-100 AND 10-20MU IS GIVEN. TEMP. DEPENDENCE OF INTERNAL FRICTION OF A SPECIMEN CONTG. 0.2PERCENT B IS GIVEN.

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ABSTRACT/EXTRACT--ON A SPECIMEN QUENCHED FROM 720DEGREES 2 PEAKS WERE
OBSD.: ONE AT 40DEGREES, AND THE OTHER AT 340DEGREES. AFTER ANNEALING
AT 500DEGREES, THE LOW TEMP. PEAK DISAPPEARED, THE HEIGHT OF THE HIGH
TEMP. PEAK REMAINED UNCHANGED. TEMP. DEPENDENCE OF INTERNAL FRICTION OF
THE SAME SPECIMEN BUT STRAINED TO 10-15PERCENT DEFORMATION AND ANNEALED
AT 500DEGREES REVEALED A PEAK AT 240DEGREES, THE PEAK AT 340DEGREES WAS
INCREASED. THE ORIGIN OF 40DEGREES PEAK IS ASSOCD. WITH MIGRATION OF
INTERSTITIAL B ATOMS UNDER STRAIN. B DISSOLVES IN ALPHA FE AND GIVES
MAX. OF INTERNAL FRICTION AT 40DEGREES. THIS MAX. IS INCREASED WHEN B
CONTENT IN FE IS INCREASED; BUT DECREASES WHEN THE BORIDES APPEAR IN THE
STRUCTURE. IT SEEMS THAT BORIDES ENHANCE PPTN. OF B ATOMS FROM SOLID
SOLN. THE PEAK AT 240DEGREES CAN BE EXPLAINED BY INTERACTION OF
DISLOCATIONS WITH B ATOMS; THE MAX. INTERNAL FRICTION AT 340DEGREES IS
RELATED TO OCCURRENCE OF BORIDES.

UNCLASSIFIED

USSR

UDC 595.775 Ceratophyllus sp. n.

DARSKAYA, N. F. and SHIRANOVICH, P. I., Scientific Research Anitplague Institute of the Caucasus and Transcaucasia

"A New Flea Species of the Genus Ceratophyllus (Siphonaptera, Ceratophyllidae) From the Caspian Lowland"

Moscow, Zoologicheskii Zhurnal, No 12, 1971, pp 1,827-1,834

Abstract: Ceratophyllus (ceratophyllus) igii Darskaja et Schiranovitch sp. n. was found in uninhabited burrows of foxes and rodents in Krasnoyarsk and other delta regions of Astrakhanskaya Oblast and in southern Kalmyk ASSR. C. igii (name composed of the initials of I. G. Ioff, an authority on fleas and plague) should be assigned to the subgenus Ceratophyllus s. str. because of the large number of teeth in the pronotal comb. In structure of the female genital ducts and spermatheca it resembles species from the C. garei group. In shape of the modified abdominal segments of the male it is similar to C. diffinis Jord (North America) and, to a lesser extent, C. garei Roths. (Holarctic) and C. frigoris Darsk. (Caucasus). It differs from species of the subgenus Ceratophyllus s. str. in lacking spicules on the inner surface of the VIII male tergite and in having a shortened and weak VIII sternite. Those features as well as the general configuration of the clasper, shape of the spermatheca, and structure of the female genital ducts are strikingly like those of C.

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USSR

DARSKAYA, N. F., and SHIRANOVICH, P. I., Zoologicheskiy Zhurnal, No 12, 1971, pp 1,827-1,834

(*Monopsyllus*) *sciurorum* Schr. The new species is evidently a transitional form between the subgenera *Ceratophyllus* s. str. and *Monopsyllus* s. l. Its hosts are believed to be ducks of the genus *Tadorna* which often nest in holes abandoned by mammals.

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USSR

UDC 616.931.336

KHORAVA, G. V., DARTSMELIYA, N. V., and DZHANDZHGA, M. V., Sukhumi Hospital
for Infectious Diseases

"Several Cases of Sodoku"

Moscow, Sovetskaya Meditsina, No 2, 1973, p 146

Abstract: Excerpts are presented from the case histories of 3 persons (29, 75, and 8 years old) who were bitten by rats and developed sodoku with the typical symptoms of the disease - fever, local inflammatory reaction at the site of the bite, headache, and enlargement of the regional lymph nodes. Penicillin proved to be efficacious in all 3 cases (200,000 every 4 hours for 4 to 7 days), and there were no relapses.

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USSR

UDC 539.125.52

DARUGA, V. K., and MATUSEVICH, YE. S.

"Neutron Generation in Various Substances by 46-Mev Alpha Particles"

Moscow, Atomnaya Energiya, Vol 33, No 3, Sep 72, pp 757-765

Abstract: The article gives refined data on neutron generation by alpha particles in thick targets. Preliminary results had been described in earlier articles by A. T. BAKOV et al. and V. K. DARUGA et al. Targets of Li, Be, C, Mg, Al, Ti, Fe, Co, Ni, Cu, Zn, Zr, Nb, Mo, Ag, Cd, Ta, W, Au, Pb, Bi, and U of natural isotopic composition were bombarded with a cyclotron beam of alpha particles with an energy of 46 ± 1 Mev. The target thickness was equal to the ionization path of the alpha particle in the substance of the pertinent target or slightly greater than this path. The following were measured in the experiments: the spectra of secondary neutrons at angles of 0 and 90° relative to the beam of bombarding particles, the angular distributions in the range $\theta = 0 \div 140^\circ$, and the absolute yields of neutrons with energies of $E_n > 0$ and $E_n > 1.8$ Mev. The following were used for the measurements: a single-crystal stilbene spectrometer with gamma-quanta discrimination

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USSR

DARUGA, V. K., and MATUSEVICH, YE. S., Atomnaya Energiya, Vol 33, No 3, Sep 72, pp 757-765

according to pulse shape, a standard "all-wave" detector with SNM-5 (BF_3) neutron counter, a $\text{ZnS}(\text{Ag})$ +plexiglas fast neutron counter, and a broad-band $\text{ZnS}(\text{Ag})+^{10}\text{B}$ detector with a polyethylene moderator.

The authors thank V. A. DULIN, V. G. DVUSHERSTNOV, and N. N. PAL'CHIKOV for helping in the measurements.

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1/2 028 UNCLASSIFIED PROCESSING DATE--13NOV70
TITLE--EFFECT OF LIGHT ON SOLUTIONS OF OPTICAL WHITENING AGENTS -U-
AUTHOR--(04)-DARVINA, V.V., KOLODNER, D.I., IVANOVA, L.S., MAKAROVA, T.P.
COUNTRY OF INFO--USSR
SOURCE--KHIM. VOLOKNA 1970, (2), 55-7
DATE PUBLISHED-----70

SUBJECT AREAS--MATERIALS, PHYSICS
TOPIC TAGS--PHOTOEFFECT, LUMINESCENCE, UV LIGHT, OPTIC BRIGHTNESS/(U)UFO15
LAMP

CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--2000/2009 STEP NO--UR/0183/70/000/002/0055/0057
CIRC ACCESSION NO--AP0125597
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PROCESSING DATE--13NOV70

CIRC ACCESSION NO--AP0125597

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. AQ. SOLNS. OF THE FLUORESCENT WHITENING AGENT WHITE S WERE EXPOSED TO DAYLIGHT OR UV IRRADN. (LAMP UFO-15) AND THEIR LUMINESCENCE INTENSITIES WERE DETD. THE DECREASE OF THE LUMINESCENCE INTENSITY WITH TIME DECREASED WITH THE WHITENER CONCN. E.G., SOLNS. CONTG. 0.1 G-L. OF THE WHITENER LOST THEIR LUMINESCENCE AFTER 24 HR WHILE THE LUMINESCENCE OF SOLNS. CONTG. 25.6 G-L. OF THE AGENT WAS UNCHANGED SMALLER THAN OR EQUAL TO 20 DAYS. THE STABILITY OF THE WHITENER WAS HIGHER IN ALK. SOLNS. FACILITY: LENINGRAD. FILIAL, VNIIV, LENINGRAD, USSR.

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